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CLAIMS

1. Magnetic separator with permanent magnets including a ferromagnetic member (2) for the circuit connection between at least two magnetic poles (3C),
5 characterized in that each magnetic pole (3C) is made up of ferrite magnets (12) in the bottom portion in contact with said ferromagnetic member (2) for the circuit connection, and of rare earth magnets (13) in the top portion that represents the entrance/exit surface (14) of the magnetic flux lines (15, 16).
2. Magnetic separator according to claim 1, characterized in that in each
10 magnetic pole (3C) the ratio between the effective magnetic length of the ferrite magnets (12) and of the rare earth magnets (13) is between 1:1 and 3:1, being preferably 2:1.
3. Magnetic separator according to claim 1 or 2, characterized in that it consists of a ferromagnetic cylinder (2) around which there are applied the
15 magnetic poles (3C), said cylinder (2) being enclosed by a protective casing (4) of non-magnetic material filled with a blocking resin (5), this assembly being secured onto a shaft so that it can be used for a conveyor (6) on which the material (8) to be treated is drawn.
4. Magnetic separator according to one or more of the preceding claims,
20 characterized in that the ferrite magnets (12) are made of barium ferrite or strontium ferrite.
5. Magnetic separator according to one or more of the preceding claims, characterized in that the rare earth magnets (13) are made of samarium-cobalt or iron-boron-neodymium.